SOUNDINGS IN FEET

12274

UNITED STATES - EAST COAST

MARYLAND

HEAD OF CHESAPEAKE BAY

Mercator Projection
Scale 1:40,000 at Lat. 39°27'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

TIDAL INFORMATION

Place Name	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
		feet	feet	feet	feet
Pond Point, Bush River	(39°33'N/76°15'W)	1.4	1.1	0.3	+0.0
Betterton, Sassafras River	(39°22'N/75°57'W)	1.4	1.1	0.3	+0.0
Georgetown, Sassafras River	(39°22'N/75°57'W)	1.4	1.1	0.3	+0.0
Chesapeake City, Slack Bay	(39°32'N/75°49'W)	2.9	2.5	0.4	+0.0
Havre de Grace	(39°32'N/76°05'W)	1.6	1.3	0.4	+0.0

(NOS)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):
ABY(C) (anchorage) A. amber; Al. alternating; Bk. black; Bn. beacon; C. can; DIA. diaphone; F. fixed; Fl. flashing; G. green; Gp. group; Gy. gray; IQ. interrupted quick; Iso. isophase (E.=E); LT HO. lighthouse; M. nautical mile; m. minutes; MICRO TR. microwave tower; Mo(A). Morse (A); O. orange; Oc. occulting; Q. quick; R. red; RACON or RA. radar beacon; RW. red and white; W. white; Y. yellow; Z. Zulu (GMT)

Bottom characteristics:
Blds. boulders; Co. coral; Cy. clay; Gravel. gravel; Gy. gray; Grs. grass; M. mud; Oys. oysters; R. rock; S. sand; Sh. shells; so. soft; sy. stony

Miscellaneous:
AUTH. authorized; Obstn. obstruction; PD. position doubtful; PA. position approximate; Rep. reported; Subm. submerged

HEIGHTS
Heights in feet above Mean High Water

AUTHORITIES
Hydrography and topography by the National Ocean Service, Charting and Geodetic Services with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

CAUTION
Only marine radiobeacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and Defense Mapping Agency Publication 117.
Radio direction finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) ○(Approximate location)

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.350" northward and 1.189" eastward to agree with this chart.

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

NOAA VHF-FM WEATHER BROADCASTS
The National Weather Service stations listed below provide continuous marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.
Baltimore, Md. KEC-83 162.40 MHz

SMALL CRAFT WARNINGS
During the boating season, small-craft warnings will be displayed from sunrise to sunset on Maryland Marine Police Cruisers, while underway in Maryland waters of the Chesapeake Bay and tributaries.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 3 for important supplemental information.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Notice to Mariners.
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 3. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 5th Coast Guard District, Portsmouth, Virginia, or at the Office of the District Engineer, Corps of Engineers in Baltimore, Maryland.
Refer to charted regulation section numbers.

NOTE B
CAUTION - Unexploded ammunition or ordnance (duds) may exist within the limits of the Restricted Area.

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION
FISH TRAP AREAS AND STRUCTURES
Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the fish trap areas. Such structures are not charted unless known to be permanent.
Regulations to assure clear passage to and through dredged and natural channels and to established landings are prescribed by the Corps of Engineers in the Code of Federal Regulations.
Definite limits of fish trap areas have been established in some areas and those limits are shown thus:
Where definite limits have not been prescribed the location of fishing structures is restricted only by the regulations.

PLANE COORDINATE GRID
(based on NAD 1927)
The Maryland State Grid is indicated on this chart at 20,000 foot intervals thus: + +
The last three digits are omitted.

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CONTINUATION OF BIRD RIVER
Scale 1:40,000

LOGARITHMIC SPEED SCALE
To find SPEED, place one point of dividers on distance run (in any unit) and the other on right point on 60 and left point will then indicate speed in units per hour. Example with

Nautical Miles
Yards

HAVRE DE GRACE
ABERDEEN
ABERDEEN PROVING GROUND
RESTRICTED AREA (33 CFR 334.140)
SUSQUEHANNA NATIONAL WILDLIFE REFUGE
(protected area)
SPESUTIE ISL
GUNPOWDER NECK
GUNPOWDER RIVER
BIRD RIVER
ROMNEY CREEK
STILL POND NECK
STILL POND CR
GROVE NECK
Edgewood
Harewood
Carroll Island
Betterton
Worton Pt.
Havre de Grace Channel
Spesutie Island Cut
Bush River Anch.
Otter Point Creek
Gunpowder Falls
Bird River Beach
Joppatowne
Aberdeen Proving Ground
Susquehanna River
Chesapeake Bay
Still Pond
Turkey Pt.
Carpenter Pt.
Perry Point
Concord Pt.
Spencer I.
Lapidum
Port Deposit
Mt. Ararat
Mt. Felix
Jacksonville
Principio Furnace
Frenchtown
Elkton
Perryman
Aberdeen
Edgewood
Joppatowne
Harewood
Carroll Island
Betterton
Still Pond
Worton Pt.

CAUTION
CHANNELS in BUOYAGE
Mariners are advised that lighthouse aids to navigation are being changed to conform to maritime standards of the International Association of Lighthouse Authorities, Maritime Buoyage System, Region B. Significant changes are: black port-hand buoys to green; black and white vertically striped buoys to red and white; remaining striped buoys, and beacon lights from white to red or green as appropriate. Changes to aids to navigation will be announced in the Defense Mapping Agency Hydrographic/Topographic Center weekly Notice to Mariners and the U.S. Coast Guard Local Notice to Mariners.

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John A. Knauss, Administrator

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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

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This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions or comments for improving this chart to the Director, Charting and Geodetic Services (N/CG22), National Ocean Service, NOAA, Rockville, Maryland 20852.

SOUNDINGS IN FEET

FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

(Head of Chesapeake Bay)

SOUNDINGS IN FEET - SCALE 1:40,000

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